SAFETY DATA SHEET



HS007-08-2019

Product Number: 7 Intumescent Wraps

Description:

The Envirograf Intumescent Wrap is a foil clad wrap for pipes and cables.

This product comprises of the following materials and therefore is supported by the following Health & Safety Data Sheets:

- (Appendix 1) Health & Safety Sheet Intumescent
- (Appendix 8) Health & Safety Sheet Foil Tape
- (Appendix 9) Health & Safety Sheet Craft Paper

Under Regulation 1907/2006 REACH Safety Data Sheets are only required for hazardous substances and mixtures/preparations; Intumescent Systems Ltd is not therefore legally obliged to supply Safety Data Sheets for its articles. Despite this Intumescent Systems Ltd has decided to provide its customers with information regarding the safe use and handling of the products listed above by means of this Safety Data Sheet.

*The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the user's own assessment of workplace risk as required by other health and safety legislation.

HEALTH & SAFETY DATA SHEET APPENDIX 1

MULTIGRAF INTUMESCENT MATERIAL

Issue 3. July 2018

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: Multigraf Intumescent Material MANUFACTURER/SUPPLIER: Multigraf Intumescent Systems Ltd

ADDRESS: Envirograf House, Barfrestone, Dover, Kent, CT15 7JG
TELEPHONE / FAX / EMAIL: 01304 842555 01304 842666 sales@envirograf.com

EMERGENCY PHONE NUMBER: 01304 842555 (Monday to Friday 8.30 – 5.30)

2. HAZARDS IDENTIFICATION

HAZARD STATEMENTS:

- 1. None for the non-woven products (manufactured articles) covered by this MSDS
- 2. None for dust and fibres released during handling

Cutting through the material and surface scuffing may release small amounts of airborne fibre, clay and carbon dust which are mechanically irritant to skin, eyes and upper respiratory system.

As with any dust, pre-existing upper respiratory symptoms and lung diseases may be aggravated.

Under the European chemicals Regulation 1907/2006 REACH this product is considered to be an article. These materials do not contain any substances of very high concern or substances intended to be released under normal foreseeable conditions of use.

Under Regulation 1907/2006 REACH Safety Data Sheets are only required for hazardous substances and mixtures/preparations; Intumescent Systems Ltd is not therefore legally obliged to supply Safety Data Sheets for its non-woven products.

Despite this Intumescent Systems Ltd has decided to provide its customers with information regarding the safe use and handling of the products listed above by means of this Material Safety Data Sheet

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPOSITION:

Substance	CAS / EC No	% by weight	Classification and labelling Regulation EC 1272/2008	Classification and labelling Directive 67/548/EEC
Mineral Wool*	287922-11-6	20 – 85	Not Classified	Not Classified
Exfoliating Graphite	7782-42-5/231-995-3	4.0 – 60	Not Classified	Not Classified
Polymeric Binder and Self Adhesive coating	N/A - polymer	5.0 - 30	Not Classified	Not Classified

^{*} Man-made vitreous silicate fibres of random orientation with alkaline oxide and alkali earth oxides (Na₂O + K₂O+CaO+MgO+BaO) content grater that 18% by weight and fulfilling one of the Note Q conditions for increased bio-solubility.

Mineral wool fibres satisfying the Note Q conditions for increased bio-solubility are not classified as carcinogenic according to Directive 97/69/EC and Regulation EC 1272/2008 (page332 of the JOCE L353 of 31 Dec 2008)

Self-adhesive products are supplied faced on one side with a Kraft release paper.

4. FIRST AID MEASURES

SKIN: Rinse affected areas with water and wash gently with soap. Do not use detergent.

EYES: Flush eyes with large quantities of water, Have eye bath readily available in areas where eye contact may occur. Seek medical attention if irritation continues.

INGESTION: Drink plenty of water. Seek medical advice.

INHALATION: Remove to fresh air, drink water and clear throat and blow nose to evacuate fibre/dust. Seek medical attention.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use extinguishing agent suitable for type of surrounding combustible materials. Do not inhale products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Do not allow dust to be wind blown.

Unwanted product should be collected and stored in sealed bags.

Do not use compressed air to remove dust or fibres from equipment

Dust/fibre should be removed using a suitable vacuum cleaner with HEPA exhaust air filtration.

The collected deposits and used vacuum cleaner bags should be sealed into poly-bags before disposal.

If sweeping is required the area should be thoroughly damped down with water before sweeping commences to prevent dust and fibres becoming airborne during sweeping

7. HANDLING AND STORAGE

HANDLING: Keep dust generation to a minimum.

STORAGE: Store dry and cool. Keep in original wrapping until required for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

APPLICABLE OCCUPATIONAL EXPOSURE LIMITS: from HSE EH40/2005 – second edition 2011 MACHINE MADE MINERAL FIBRE:

(excluding Refractory Ceramic Fibre and Special Purpose Fibres): 2.0 fibres/ml & 5 mg/m; (8 hr TWA)

FINE CARBON DUST: 3.5 mg/m; (8 hr TWA) and 7 mg/m; (15 minute reference))

RESPIRATORY PROTECTION: Use local ventilation systems where available. If workplace exposures exceed

the limits wear disposable dust respirator to EN149:2001 FFP2 minimum

HAND PROTECTION: Use of disposable nitrile rubber gloves is recommended.

EYE PROTECTION: Wear goggles or safety glasses with side shields. Do not wear contact lenses.

SKIN PROTECTION: Wear overalls that are loose fitting at the neck and wrists.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Flexible Grey fibrous mat with black speckle

DENSITY: 200 - 500 kg/m³

EXPANSION: Rapid volumetric expansion occurs when product is heated above 200°C

FLAMMABILITY: Material will sustain combustion for a short period until organic binder (and SAB coating) is

burnt out or resulting expansion self-extinguishes.

10. STABILITY AND REACTIVITY

STABILITY / CONDITIONS TO AVOID: Stable.

MATERIALS TO AVOID: Strong oxidizing agents, strong alkalis and hydrofluoric acid.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition of the polymeric binder will occur at temperature above 200°C releasing smoke, H₂O, CO, CO₂ and hydrocarbons. When heated above 250°C the graphite will expand resulting in a thermally insulation char.

HAZARDOUS POLYMERISATION: Will not occur

11. TOXICOLOGICAL INFORMATION

MINERAL WOOL FIBRE:

Coarse fibres: in common with other man-made mineral fibres the vitreous silicate fibres in this product are mechanical irritants which may result in temporary irritation of the throat, eyes or skin.

Respirable fibres: the mineral wool fibres in these products contain fibres which are less than 3.0µm diameter and greater than 5.0µm long and which are classified as respirable.

Animal studies: short term inhalation studies of rats exposed to high levels of stone wool fibres have shown that the long fibres are biodegradable and quickly disappear from the lungs.

Human Epidemiological studies: large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted with traditional mineral wools. The studies found no significant evidence of non-malignant lung disease (e.g. fibrosis) The studies did not establish a causal relationship between exposure to traditional mineral wools and malignant diseases (lung cancer or mesothelioma). The particular mineral wool fibre used in the products covered by this SDS is based on a new formulation with increased bio-solubility giving even more rapid clearance of fibres from the lungs compared with traditional mineral wools.

GRAPHITE:

Powdered graphite is non-toxic. High levels of airborne graphite dust may be a mechanical eye irritant. Skin contact with graphite dust may cause temporary irritation due to mechanical effects; repeated prolonged exposures may lead to dermatitis. Airborne graphite dust is an upper respiratory irritant; exposures may aggravate pre-existing upper respiratory and lung diseases. Cases of pneumoconiosis, pulmonary fibrosis and emphysema have been reported in workers following prolonged exposures to high levels of airborne graphite dust.

POLYMERIC BINDER AND SELF ADHESIVE COATING:

The Polymeric binder and SAB coating are considered to be non-hazardous.

12. ECOLOGICAL INFORMATION

This product will remain stable over time with the inorganic components remaining inert.

13. DISPOSAL CONSIDERATIONS

Waste is not classified as a hazardous waste and may be disposed of at a normal licensed industrial waste site. Local regulations should be considered. Waste should be bagged or suitably contained for disposal to prevent any dusts being wind blown during disposal.

14. TRANSPORT INFORMATION

Not regulated for Transport. Ensure that dust is not windblown during transportation. Ensure that dust or fibres are not wind-blown during transportation.

15. REGULATORY INFORMATION

<u>Product Hazard Classification according to Directive 67/548 EEC:</u> Not classified

Product Hazard Classification according to Regulation CE1272/2008: Article - not classified

16. OTHER INFORMATION

Notes: revised and reissued with minor changes 6th September 2018

Further information regarding working with man made mineral fibres and measurement techniques may be obtained by referring to Guidance Note EH46 1990 and NDHS59 1998 published by the UK, Health & Safety Executive.

HEALTH & SAFETY INFORMATION SHEET APPENDIX 8

FOIL-ADHESIVE TAPE

25th July 2018 ISSUE 3

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: Foil-Adhesive Tape

MANUFACTURER/SUPPLIER: Envirograf

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EMERGENCY PHONE NUMBER: 01304 842555 (Monday to Friday 8.30 – 5.30)

2. HAZARDS IDENTIFICATION

This product is considered generally safe and inert and no hazards are anticipated provided good standards of industrial hygiene and good housekeeping are observed

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical description: contains no dangerous ingredients or impurities

Interleaved aluminium foil tape with hot melt adhesive

4. FIRST AID MEASURES

Eye Contact: No need for first aid is anticipated **Skin Contact:** No need for first aid is anticipated

Inhalation: The slight odour from the adhesive is not considered dangerous or an irritant – seek fresh air if

necessary

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Carbon dioxide, dry chemical. Note: water should not be used. **Protective equipment for fire-fighters:** Self-contained respiratory equipment should be worn

6. ACCIDENTAL RELEASE MEASURES

Not applicable

7. HANDLING AND STORAGE

Due regard should be given to the possibility of static build up within the rolls and their particular applications especially where solvents are used or stored

It is recommended that these products be stored out of direct sunlight, in a dry environment away from moisture at temperatures between 5°C and 30°C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Finger damage is always a risk when aluminum foil and paper products are decoiled or applied. The use of lightweight leather gloves is recommended. Discarded release paper is a slip hazard and just not be left on any floor space but disposed of together with spent cores into suitable waste containers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid
Colour: silver
Boiling point: not applicable

Vapour pressure: not applicable

Solubility in water: the adhesive is not soluble in water

Viscosity: not applicable

Melting point: the adhesive will soften at around 70°C

Flash point: 200°C

10. STABILITY AND REACTIVITY

Stable under normal conditions of handling and storage

11. TOXICOLOGICAL INFORMATION

Not applicable

12. ECOLOGICAL INFORMATION

Not applicable

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations at approved sites.

14. TRANSPORT INFORMATION

Not regulated for transport

15. REGULATORY INFORMATION

Foil Adhesive Tape is an "article" not a chemical. It is not classified as dangerous under Classification, Labelling and Packaging of Chemical Regulations (CPL) & the UN's Globally Harmonised System (GHS), and therefore does not require a Safety Data Sheet. It is exempt from the requirements to register under REACH. As a service to our customers, however Intumescent Systems Ltd has produced this data sheet.

16. OTHER INFORMATION

History

Date of revision 25th July 2018
Reason for revision General review / change of format
Sections revised All sections revised

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the most recent REACH Regulations. The product should not be used for purposes other than those shown without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. This information contained in the safety data sheet is based on present knowledge and current EU legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

HEALTH & SAFETY INFORMATION SHEET APPENDIX 9 KRAFT PAPER

Issue 3. 26/7/2018

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: Kraft Paper MANUFACTURER/SUPPLIER: Envirograf

ADDRESS: Envirograf House, Barfrestone, Dover, Kent, CT15 7JG
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EMERGENCY PHONE NUMBER: 01304 842555 (Monday to Friday 8.30 to 5.30)

2. HAZARD IDENTIFICATION

In a sustained fire situation the coating will burn to give smoke containing carbon monoxide, carbon dioxide, hydrocarbons, nitrogen based and halogen based gases.

There are no major health hazards associated with the fabric; however exposure to glass fibres sometimes causes irritation of the skin and less frequently irritation of the eyes, nose or throat.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterisation: Fibrous glass (E-type, continuous filament) compositions consisting principally of oxides of silicon, aluminium, calcium, boron and magnesium, fused in an amorphous vitreous state aluminium Foil and neoprene adhesive.

Glass fibre is not classified as hazardous according to Regulation (EC) 1272/2008 as amended

Fibrous glass, continuous filament EC:266/046-0 Not classified

CAS: 65997/17-3

4. FIRST AID MEASURES

Inhalation: In case of inhalation of glass dust particles or fumes from thermal degradation move into fresh air, if irritation persists seek medical attention

Skin Contact: If irritation is a problem then rinse the affected areas with cool water, then wash gently with mild soap. If glass fibre becomes embedded in the skin then seek medical attention

Eye Contact: Flush eyes with clear water for at least 15 minutes, if irritation persists seek medical attention

5. FIRE-FIGHTING MEASURES

Glass fibre is inherently non-flammable

Suitable extinguishing media: Water, carbon dioxide, dry powder

Protective equipment for fire fighters: In a sustained fire, self-contained breathing apparatus and protective clothing should be utilised

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: None

Environmental precautions: None

Method for cleaning up: Dust pan and wet brush

7. HANDLING AND STORAGE

Precautions for handling: No special measures, for personal protection see section 8. Glass fibre has electrical isolation properties and so may give some static

Precautions for storage: Store below 25°C in a dry, well ventilated place

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection: None required, if airborne glass fibre concentrations exceed the control limit, respiratory protection for nuisance dust should be provided.

Eye protection: Safety glasses with side shields should be worn.

Hand/Skin protection: Protective gloves, overalls buttoned to fit loosely at the neck and wrists and long trousers may reduce irritation in some operations. Barrier cream may provide further protection from irritation.

Hygiene measures: Wash hands before breaks and at the end of the day. Launder items of clothing contaminated with glass fibre dust separately.

Control limits: Airborne glass dust – TLV = 5mg/m3

Possible trace retained toluene = 100ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White woven fibres / Aluminium Sheet

Colour: White / Silver

Odour: None

pH Value: Not applicable

Melting point (softening): 830° C

Flash point: Not applicable

Auto ignition temperature: Not applicable

Explosive properties: Not applicable

Specific gravity: 2.6g/cm3

Solubility: Insoluble in water. Glass fibre will disperse, to some extent in organic

solvents like styrene, acetone etc.

10. STABILITY AND REACTIVITY

Conditions to avoid: Stable under recommended storage and handling conditions (see section 7)

Material to avoid: Basic phosphates, alkalis, hydrofluoric acid

Hazardous decomposition products: Thermal decomposition: Carbon dioxide, carbon monoxide, trace amounts (ppm) hydrocarbons, nitrogen based and halogen based gases.

11. TOXICOLOGICAL INFORMATION

Inhalation: The products of thermal decomposition, including carbon dioxide and carbon monoxide may cause dizziness and headache after prolonged low level exposure. Pre-existing upper respiratory and lung disease may be aggravated.

Skin contact: No toxicological effect. **Eye contact:** No toxicological effect.

This product is not manufactured using glass fibre with diameters that are classified as respirable (fibres with diameters less than 3.0 microns which are capable of travelling into the body to the trachea, bronchi etc) All of the fibres in this product have fibre diameters equal to or greater than 4.5 microns, and are therefore not physically capable of travelling beyond the nose and pharynx.

12. ECOLOGICAL INFORMATION

Glass fabrics are not readily biodegradable. No known harmful effects on the environment

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products: Dispose as solid, non-recyclable waste according to local regulations.

Contaminated packaging: Empty containers should be transported/delivered using a registered waste carrier for local recycling where possible or waste disposal.

14. TRANSPORT INFORMATION

No special precautions or restriction involving transport are known.

15. REGULATORY INFORMATION

None required

16. OTHER INFORMATION

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the most recent REACH Regulations. The product should not be used for purposes other than those shown without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. This information contained in the safety data sheet is based on present knowledge and current EU legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.